

Smartphone-induced tendinitis: A case report

Kentaro Iwata¹

¹Division of Infectious Diseases, Kobe University Hospital, Kusunokicho 7-5-2, Chuoku, Kobe, Hyogo

ABSTRACT

Repetitive manipulation of thumbs and fingers too much can cause de Quervain tenosynovitis. Some smartphones are becoming larger than their predecessors, with larger display, which might lead to more occurrence of tenosynovitis. A Japanese man in his 40s developed de Quervain tenosynovitis after buying a smartphone (iPhone X) while using his thumb to handle it. Ceasing to use the thumb and using his right index finger while holding the phone eased his symptoms and he recovered without specific treatment. Health care providers should be aware of this phenomenon, particularly related to newly purchased smartphones.

Keywords: De Quervain tenosynovitis, iPhoneXdinitis, smartphone

Introduction

Repetitive manipulation of thumbs and fingers too much can cause de Quervain tenosynovitis. iPhone X, a product sold by Apple Inc., has larger body and display than most predecessors. I here report a case of de Quervain tenosynovitis developing in a patient who renewed his smartphone to iPhone X, with using his thumb to handle it.

Case Presentation

A Japanese man in his late 40s without significant medical history developed gradual onset right wrist pain. The pain was located on radial part of the wrist and worsened by extension, abduction, or adduction of his thumb. There was no pain as far as he did not move the wrist. There was no swelling or erythema on the lesion but had tenderness on palpating over the area where abductor pollicis longus and extensor pollicis brevis tendons were located. The pain was only on dorsal side of the wrist and there was no pain or tender on palmar side. By history taking and physical examination, the diagnosis of de Quervain tenosynovitis was made. He took no medication and simply waited for spontaneous

improvement of the symptoms. However, symptoms persisted and he became not able to hold heavy substances because of the pain.

A week later, he became aware that his symptoms worsened after he started to use newly bought iPhone X, which he obtained approximately 2 months prior to the onset of the symptoms. He held his iPhone with his right hand and texted with thumb on the same hand. He previously used to use iPhone 6, which had much smaller body and display [Figure 1a and b].^[1] Apparently, the tendinitis was caused by use of iPhone X. After changing his habitual practice of holding his smartphone with his right hand, he started to hold his phone with his left hand, manipulating the display with his right index finger [Figure 1c]. Symptoms gradually improved over a few weeks and became free of symptoms.

Discussion

Texting using smartphone is known to cause de Quervain tenosynovitis.^[2,3] One might not be able to use his/her body suitably for novel gadgets and reports showed tendinitis caused by these gadget, such as Nintendo game Wii.^[4]

iPhone X, a product sold by Apple Inc., is larger than its most predecessors, with larger display without home button.^[1] This led

Address for correspondence: Prof. Kentaro Iwata,
Division of Infectious Diseases, Kobe University Hospital,
Kusunokicho 7-5-2, Chuoku, Kobe, Hyogo.
E-mail: kentaro iwata1969@gmail.com

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/jfmpc.jfmpc_230_19

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Iwata K. Smartphone-induced tendinitis: A case report. J Family Med Prim Care 2019;8:1784-5.

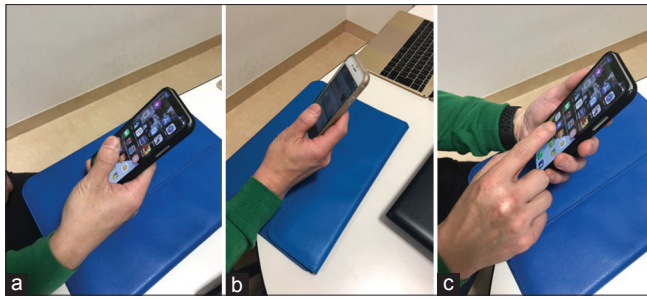


Figure 1: (a) Use of iPhoneX with one hand. (b) Use of iPhone 6. (c) Use of iPhoneX with two hands

to larger area to cover when one to manipulate it with a finger. Thumb, a shorter than other fingers, might not reach corners of wider display and it could lead to development of tenosynovitis.

The most effective treatment of this type of tendinitis (iPhone Xdinitis) is by altering the habit of using thumb to other fingers such as index finger.

In conclusion, use of large display smartphone in one hand can be a cause of tendinitis on the thumb. Physicians should be aware

of the possibility of this phenomenon and should ask patients with wrist pain regarding the type and size of cellphone they use, as well as fingers/thumb they use for texting.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Apple iPhone X vs Apple iPhone 6-Phone specs comparison [Internet]. Phone Arena. [cited 2019 Mar 18]. Available from: <https://www.phonearena.com/phones/compare/Apple-iPhone-X, Apple-iPhone-6/phones/10414,8346>.
2. Ashurst JV, Turco DA, Lieb BE. Tenosynovitis caused by texting: an emerging disease. *J Am Osteopath Assoc* 2010;110:294-6.
3. Williams IW, Kennedy BS. Texting tendinitis in a teenager. *J Fam Pract* 2011;60:66-7.
4. Bonis J. Acute Wiiitis. *N Engl J Med* 2007;356:2431-2.